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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,722	02/19/2004	Koichi Yamaguchi	040803-0308273	3203
909	7590	10/31/2005		
PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER COLLADO, CYNTHIA FRANCISCA	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,722

Applicant(s)

YAMAGUCHI, KOICHI

Examiner

Cynthia F. Collado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/12/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al (US Patent No.6, 317,665).

2. Regarding claim 1, Tabata teaches an internal combustion engine (see figure 2, element 1), a torque converter having an input shaft connected to an output shaft of said internal combustion engine (see figure 3, crankshaft 12 is connected to input shaft of torque converter), a multistage transmission (see figure 2, element 4) connected to an output shaft (see figure 2, element 32) of said torque converter (see figure 2, element 2) a motor-generator (see figure 2, element 3) a storage battery (see figure 6, element 41) and a converter circuit for bidirectionally transmitting electric energy

between said storage battery and said motor-generator and a program control circuit for controlling said converter circuit (see column 5, lines 55-67) also (see column 6, lines 1-10), a program control circuit including control means for saddling the motor-generator with torque for an axle of the vehicle during a time period in which a slip occurs in the torque converter in a shifting process of the multistage transmission during a running of the vehicle (see column 8, lines 5-22). Tabata discloses the claimed invention except for a motor-generator having a rotary shaft connected to an output shaft side of the torque converter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a motor-generator having a rotary shaft connected to an output shaft side of the torque converter, since it has been held that rearranging parts of an invention involves only routine skill in the art.

3. Regarding claim 2, Tabata discloses Control means including means for operating a motor-generator as a motor during a time period from a time instance at which a slip is detected under a condition that rotation speed of the output shaft of a torque converter is lower than rotation speed of the input shaft of said torque converter to a time instance at which the torque converter is locked up (see column 9, lines 8-33).

4. Regarding claim 3, Tabata teaches control means including means for operating a motor-generator as a generator during a time period from a time instance at which a slip is detected under a condition that rotation speed of said output shaft of said torque converter is higher than rotation speed of said input shaft of said torque converter to a time instance at which said torque converter is locked up (see column 8, lines 23-38).

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5. Regarding claim 4, Tabata teaches a torque converter is a hydraulic torque converter (see column 3, lines 34-50).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,741,917 issued to Tomikawa teaches a hybrid vehicle control apparatus.

US Patent No. 6,913,558 issued to Mori et al teaches a control system for stopping and starting vehicle engine.

US Patent No. 5,806,617 issued to Yamaguchi teaches a hybrid vehicle.

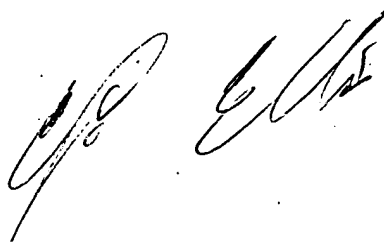
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia F. Collado whose telephone number is (571)2728315. The examiner can normally be reached on mon-fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571)2726914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CFC 10/24/05



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